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February 6, 2004

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

RE: IB Docket No. 02-364 Ex Parte Notice

Dear Ms. Dortch:

Today, Tony Navarra, President of Globalstar, L.P. ("GLP"), and the undersigned participated in a meeting with Sam Feder, Legal Advisor to Commissioner Kevin Martin, regarding GLP's positions on issues in the above-referenced docket.

As summarized on the enclosed handout "Big LEO Band Plan," which was distributed at the meeting, we explained why the record in this docket does not support any change to the Big LEO Mobile-Satellite Service ("MSS") band plan. GLP is fully using its assigned Big LEO spectrum for traditional and innovative MSS services. Iridium Satellite, the only other operational Big LEO licensee, has not demonstrated that its system is spectrum constrained, based on its comments filed in this docket and on Iridium traffic data obtained by GLP from other sources.

Pursuant to Section 1.1206(b)(2) of the Commission's Rules, this letter and the enclosure are being filed electronically over the Commission's Electronic Comment Filing System.

Respectfully submitted,


William D. Wallace

Enclosure



BIG LEO BAND PLAN

IB DOCKET NO. 02-364

February 5, 2004

Globalstar

The Big LEO Band Plan: History

- During the Big LEO MSS rulemaking, four NGSO applicants selected CDMA technology and were licensed to share 11.35 MHz in the L-band uplink (1610-1621.35) and 16.5 MHz in the S-band downlink (2483.5-2500)
- Iridium insisted on a non-sharing technology and use of bidirectional links in the L-band; Iridium was licensed for exclusive use of 5.15 MHz in the L-band for its uplinks and downlinks (1621.35-1626.5)
- The FCC reserved the right to review the L-band assignments “in the event only one CDMA licensee goes forward” and if other circumstances developed

Globalstar's Use of the Available CDMA Spectrum

- Globalstar adapted its system design to the band division and technical rules established for CDMA MSS systems in the 1994 Big LEO rulemaking
- Globalstar designed its system to share spectrum and to operate with asymmetric uplink/downlink assignments (11.35 MHz uplink; 16.5 MHz downlink)
- Globalstar also had to design system to accommodate other services that share spectrum and affect usability of L-band and S-band

Sharing CDMA Spectrum With Other Services

- Radio Astronomy Service holds primary allocation at 1610.6-1613.8 MHz
 - Globalstar must protect RAS during observations through exclusion zones; requires shifting calls to upper L-band, at times above 1616 MHz
- Global Navigation Satellite System (GPS and GLONASS) operates from 1574-1610 MHz
 - Out-of-band emissions limits applicable to Big LEO systems become more difficult to meet closer to 1610 MHz
 - Designing handsets to meet OOB limits results in restrictions on capacity in L-band channels near 1610 MHz
- ISM Allocation in Big LEO S-band (downlink)
 - Microwave ovens, other unlicensed devices
 - May cause interference to forward links depending on location, proximity, proliferation, shielding, outside use, etc.

Current and Planned Globalstar Services

- Since licensing in 1995, the Globalstar has continued to develop new equipment and services in reliance on the Big LEO Band Plan, including voice and data services, maritime and aviation products, simplex telemetry, ATC
- Voice and data services
 - In U.S., at least four or five (1.23 MHz) channels at L-band and eight or nine channels at S-band required for standard voice and data services
- Aviation
 - Designed to operate above 1616 MHz in L-band to meet FAA/RTCA standards for protection of GNSS
 - Speed of airplanes and movement through gateway service areas require assignment of two separate channels each for forward and return links

Current and Planned Globalstar Services

- Simplex telemetry service
 - Requires assignment of two channels (2.5 MHz channelization) for commercially-acceptable quality of service
 - A reduction in usable spectrum would compromise this new service, for which there is high demand by the U.S. Government in the Middle East
- Ancillary Terrestrial Component
 - If implemented, would be used in urban areas
 - Requires at least one forward link and one return link channel in certain geographic areas

Iridium Has Failed to Demonstrate a Need for Additional Spectrum

- Iridium petitioned for more spectrum in L-band, citing increased subscribers, ATC
- But Iridium's own data demonstrate that Iridium currently does not come close to fully using its available spectrum in the United States
- Iridium's own data show that it has not been able to increase traffic on satellites even after additional spectrum was made available for Iridium in the Middle East via an STA
- Iridium cannot provide ATC in the Big LEO L-band alone even with more spectrum

Conclusions

- The record does not support any change to the Big LEO MSS band plan
 - All available Big LEO spectrum is needed for Big LEO systems
 - The lower CDMA portion of the L-band remains encumbered
 - Iridium has not demonstrated that redivision of the L-band is in the public interest
- Globalstar is fully using its assigned spectrum for both traditional and innovative MSS services
- There are voluntary, cooperative methods of addressing temporary, geographically isolated capacity shortages, if needed